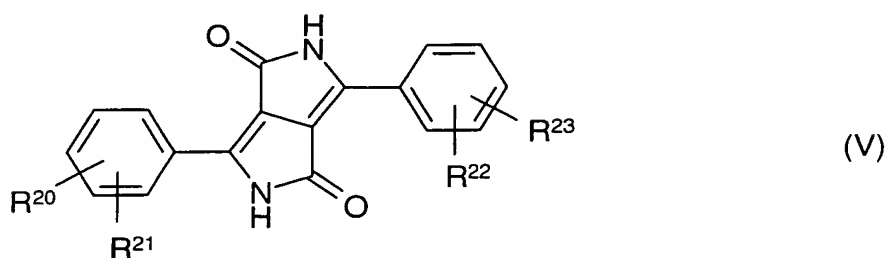


We claim:

- 1) A pigment preparation comprising
- a) at least one diketopyrrolopyrrole pigment of the formula (V) as a
base pigment,

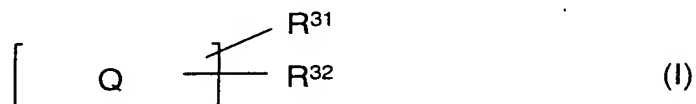


where

R^{20} , R^{21} , R^{22} and R^{23} are independently hydrogen, halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, cyano or phenyl;

and

- b) at least one pigment dispersant of the formula (I),

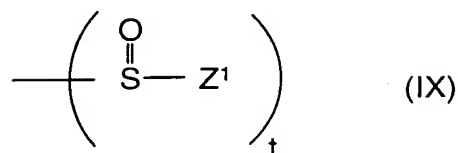
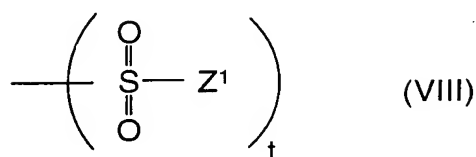
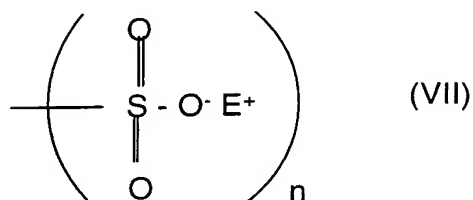
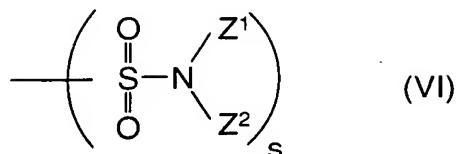


where

R^{31} is a radical of the formula (VI), (VIII) or (IX),

R^{32} is a radical of the formula (VII),

s or t are a number from 0.1 to 4.0



n is a number from 0 to 2, with the proviso that n is 0 when R³¹ is a radical of the formula (VIII) or (IX),

5

E⁺ is H⁺ or the equivalent M^{m+}/m of a metal cation M^{m+} from the 1st to 5th main group or from the 1st or 2nd or from the 4th to 8th transition group of the periodic table of chemical elements, m being one of 1, 2 or 3; an ammonium ion N⁺R⁹R¹⁰R¹¹R¹², where the substituents R⁹, R¹⁰, R¹¹ and R¹² are each independently a hydrogen atom, C₁-C₃₀-alkyl, C₂-C₃₀-alkenyl, C₅-C₃₀-cycloalkyl, phenyl, (C₁-C₈)-alkylphenyl, (C₁-C₄)-alkylenepheryl, or a (poly)alkyleneoxy group of the formula -[CH(R⁸⁰)-CH(R⁸⁰)-O]_k-H, where k is a number from 1 to 30 and the two R⁸⁰ radicals are independently hydrogen, C₁-C₄-alkyl or, when k is > 1, a combination thereof;

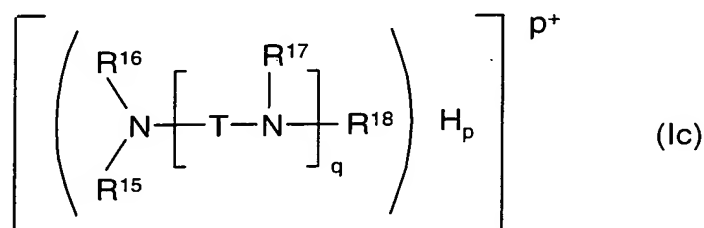
10 and wherein R⁹, R¹⁰, R¹¹ and/or R¹² alkyl, alkenyl, cycloalkyl, phenyl or alkylphenyl may each be substituted by amino, hydroxyl and/or carboxyl;

15

or where the substituents R^9 and R^{10} may combine with the quaternary nitrogen atom to form a five-, six- or seven-membered saturated ring system which if appropriate contains still further heteroatoms selected from the group consisting of O, S and N;

5 or where the substituents R^9 , R^{10} and R^{11} may combine with the quaternary nitrogen atom to form a five-, six- or seven-membered aromatic ring system which if appropriate contains still further heteroatoms selected from the group consisting of O, S and N and which has if appropriate additional rings fused onto it;

10 or wherein E^+ defines an ammonium ion of the formula (Ic)



where

15 R^{15} , R^{16} , R^{17} and R^{18} are independently hydrogen or a (poly)alkyleneoxy group of the formula $-[CH(R^{80})-CH(R^{80})O]_k-H$, where k is a number from 1 to 30 and the two R^{80} radicals are independently hydrogen, C_1 - C_4 -alkyl or, when $k > 1$, a combination thereof;

q is a number from 1 to 10;

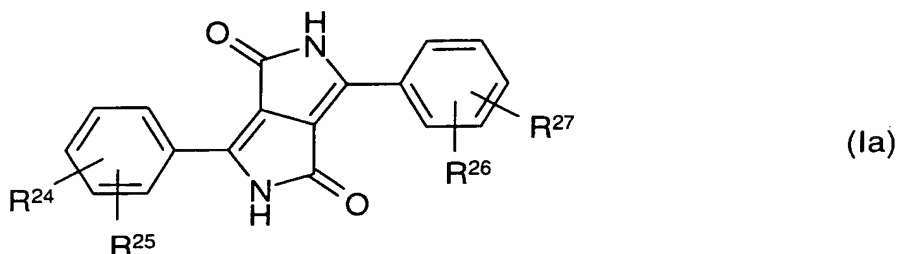
20 p is a number from 1 to 5, subject to the proviso that $p \leq q+1$;

T is a branched or unbranched C_2 - C_6 -alkylene radical; or where T when q is > 1 may also be a combination of branched or unbranched C_2 - C_6 -alkylene radicals;

25 Z^1 and Z^2 are the same or different and are hydrogen or C_1 - C_{30} -alkyl or C_1 - C_{30} -alkenyl radicals which are linear or branched and unsubstituted or halogen, hydroxyl, hydroxycarbonyl or C_1 - C_6 -alkoxy-substituted, wherein the alkenyl radical may be singly or multiply unsaturated, with the proviso that Z^1 and Z^2 are not both hydrogen;

and

Q is a radical of a diketopyrrolopyrrole compound of the formula (Ia)



5

where R^{24} , R^{25} , R^{26} and R^{27} are independently hydrogen, halogen, (C_1-C_4) -alkyl, (C_1-C_4) -alkoxy or cyano.

10 2) The pigment preparation according to claim 1 wherein s or t is 0.2 to 3.0 and n is 0 to 0.5.

3) The pigment preparation according to claim 1 or 2 wherein Z^1 and Z^2 are the same or different and are each C_2-C_{16} -alkyl,
 15 R^{24} and R^{26} are each hydrogen and R^{25} and R^{27} are each hydrogen, methyl, tert-butyl, chlorine or cyano.

4) The pigment preparation according to at least one of claims 1 to 3 wherein the base pigment of the formula (V) has
 20 R^{21} and R^{23} both hydrogen and R^{20} and R^{22} the same or different and each hydrogen, methyl, tert-butyl, chlorine, cyano or phenyl.

5) The pigment preparation according to at least one of claims 1 to 4 wherein
 25 the base pigment is C.I. Pigment Orange 71, 73, 81, C.I. Pigment Red 254, 255, 264, 270 or 272.

6) The pigment preparation according to at least one of claims 1 to 5 that consists essentially of

- a) .50% to 99.9% by weight of at least one base pigment according to a),
b) 0.1% to 25% by weight of at least one pigment dispersant according to b),
and
c) 0% to 25% by weight of auxiliaries,
- 5 the fractions of the respective components being based on the total weight of the preparation (100% by weight).
- 7) A process for producing a pigment preparation according to at least one of claims 1 to 6, which comprises the pigment dispersant or dispersants and the
10 base pigment or pigments being mixed with each other or being allowed to act on each other during their manufacturing operation, which comprises synthesis, fine division, dispersion, if appropriate finishing, and also isolation as a presscake or as a dry granulate or powder.
- 15 8) The use of a pigment preparation according to one or more of claims 1 to 6 for pigmentation of plastics, resins, coatings, paints or electrophotographic toners and developers and also of inks, including printing inks.
- 9) The use according to claim 8 for warpage-free mass pigmentation of partly
20 crystalline plastics.
- 10) The use according to claim 9 wherein the partly crystalline plastic is a homopolymer, block copolymer or random copolymer or terpolymer of ethylene, propylene, butylene, styrene and/or divinylbenzene.
25
- 11) The use according to claim 9 or 10 wherein the partly crystalline plastic is a polyethylene, polypropylene, polystyrene, PVC, a polyester, a polyamide or a thermoplastic ionomer.
- 30 12) The use according to one or more of claims 9 to 11 wherein the partly crystalline plastic is HDPE, MDPE, LDPE, polyethylene terephthalate, nylon 6 or nylon 66.